Audit Report

OFFICE OF THE INSPECTOR GENERAL

NAVY RESEARCH AND DEVELOPMENT CONTRACT FOR JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY

Report No. 96-050

December 21, 1995

Department of Defense

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Acronyms

FAR	Federal Acquisition Regulation
NAVTECHREP	Naval Technical Representative
SPAWAR	Space and Naval Warfare Systems Command

INSPECTOR GENERAL
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December 21, 1995

MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY
(FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Audit Report on Navy Research and Development Contract for Johns Hopkins University Applied Physics Laboratory (Report No. 96-050)

We are providing this audit report for information and use. This report is the second of two reports from our audit of the Navy research and development contract for Johns Hopkins University Applied Physics Laboratory. The first report was Report No. 95-001, "Navy Proposed Follow-On Research and Development Contract for Johns Hopkins University Applied Physics Laboratory," October 3, 1994.

Comments on a draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Garold E. Stephenson, Audit Program Director, at (703) 604-9332 (DSN 664-9332) or Mr. Eugene E. Kissner, Audit Project Manager, at (703) 604-9323 (DSN 664-9323). See Appendix G for the report distribution. The audit team members are listed inside the back cover.

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Office of the Inspector General, DoD

Report No. 96-050 **December 21, 1995**
(Project No. 4CH-5006.01)

Navy Research and Development Contract for Johns Hopkins University Applied Physics Laboratory

Executive Summary

Introduction. During the last 2 years, Navy contracting and university laboratory management officials at the Space and Naval Warfare Systems Command and officials at the Naval Technical Representative Office at Johns Hopkins University Applied Physics Laboratory (Applied Physics Lab) have made substantial improvements in the management, administration, and control of the contract for the Applied Physics Lab. We commend them for their achievements.

This report is the second of two reports from our audit of the Navy research and development contract for the Applied Physics Lab. This report discusses the Navy procedures for placing and monitoring task orders and administering contracts N00039-91-C-0001 and N00039-95-C-0002 for the Applied Physics Lab. The two contracts are valued at $3.2 billion for services over 8 years, about $400 million a year. The 36 task orders that we reviewed were valued at $177.3 million.

Audit Objectives. The overall audit objective was to evaluate policies and procedures at the Space and Naval Warfare Systems Command for awarding and administering the Navy research and development contract with the Applied Physics Lab. We also evaluated the adequacy of the management control program as applicable to administering the contracts. The portion of the objective concerning the proposed award of a follow-on contract (contract N00039-95-C-0002) to the Applied Physics Lab and the management control program related to that portion of the objective were discussed in Inspector General, DoD, Report No. 95-001, "Navy Proposed Follow-On Research and Development Contract for Johns Hopkins University Applied Physics Laboratory," October 3, 1994. A summary of Report No. 95-001 is included in Appendix B.

Audit Results. The Space and Naval Warfare Systems Command contracted with the Applied Physics Lab in a manner that prevented effective contract administration of contract N00039-91-C-0001. Consequently, the Government could not:

o certify that 31 of the 36 task orders reviewed were awarded noncompetitively based on a strategic relationship for work that was within the essential capabilities that the Navy wanted to maintain at the Applied Physics Lab,

o determine whether the costs that the Applied Physics Lab proposed for 33 of the 36 task orders were necessary and reasonable,

o verify what work was ordered on 24 of the 36 task orders reviewed and whether the contractor performed the work at reasonable costs on 33 of the 36 task orders; or

o determine whether the work performed was within the scope of the contract on 24 of the task orders.

At the time of the audit, the Navy was taking corrective actions to address those issues. The Navy identified six core capabilities to be maintained at the Applied Physics Lab and intends to reduce the essential capabilities in contract N00039-95-C-0002 from nine to six capabilities to correspond to the core capabilities. Non-Navy task sponsors have been requested to initiate action to contract separately for their work in FY 1996. Also, the Navy set a goal to compete about $80 million of Navy tasks during FYs 1996 and 1997 and identified 22 task orders that may be competitively awarded. Additionally, Space and Naval Warfare Systems Command officials began working with task sponsors and officials at the Applied Physics Lab to refine cost estimates. The recommendations in this report complement the Navy efforts.

The management controls were adequate as they applied to the overall audit objective. Not performing contract administration functions resulted from inadequate guidance on administering task order contracts rather than from any identified material weaknesses in established management controls over contract administration. Implementing the recommendations will improve procedures for placing task orders and administering the task order contract, which should provide future monetary benefits. However, we could not quantify the amount because the amount depends on the number of task orders that are competitively awarded and on management's evaluations and negotiations of costs proposed by the Applied Physics Lab. See Part I for a discussion of the audit results and Appendix E for a summary of all potential benefits resulting from the audit.

Summary of Recommendations. We recommend determination of which work should be competed according to the essential capabilities in the contract and the strategic relationship between the Navy and the Applied Physics Lab. (The Navy has already begun this process and has identified 22 Navy task orders intended for placement on contract N00039-95-C-0002 for possible competitive award.) We recommend that task sponsors determine whether the resources and costs proposed by the Applied Physics Lab are necessary and reasonable and that the Applied Physics Lab submit financial reports that contain specific information that task sponsors need to monitor costs incurred by the Applied Physics Lab. We also recommend that responsibility for contract administration with the Applied Physics Lab be transferred from the Naval Technical Representative office at the Applied Physics Lab to the Defense Contract Management Command.

Management Comments. The Navy generally agreed that, in contract N00039-91-C-0001, the Space and Naval Warfare Systems Command contracted with the Applied Physics Lab in a manner that prevented effective contract administration. The Navy concurred with the recommendations on issuing guidance on determining whether research and development work being considered for the Applied Physics Lab should be competed and on determining whether the resources and costs proposed by the Applied Physics Lab are necessary and reasonable. The Navy also concurred with the recommendation that the Applied Physics Lab submit specific information needed by task sponsors to monitor costs incurred and partially concurred with the recommendation to transfer contract administration responsibilities to the Defense Contract Management Command. The Navy will conduct a Command Inspection of the Naval Technical Representative office and hold discussions with the Defense Contract Management Command before making a final decision on transferring the contract administration functions. See Part I for a summary of management comments and Part III for the complete text of management comments.

Audit Response. The Navy comments are responsive. We agree with the actions that the Navy plans to take before it makes a final decision on transferring contract administration functions to the Defense Contract Management Command.

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Part I - Audit Results

Audit Background

Establishing the Applied Physics Lab. The Johns Hopkins University Applied Physics Laboratory (Applied Physics Lab) is a Navy-supported, university-affiliated research center, under contract with the Space and Naval Warfare Systems Command (SPAWAR). The Applied Physics Lab was established in 1942 to develop a projectile proximity fuse for antiaircraft defense. The Applied Physics Lab is an independent, not-for-profit division of Johns Hopkins University, and the university does not allocate any of its costs to the Applied Physics Lab. At the end of World War II, the university agreed, at the request of the Navy, to continue operation of the Applied Physics Lab.

Contracting With the Applied Physics Lab. The Navy has been contracting for engineering, research, and development services on a noncompetitive basis with the Applied Physics Lab since World War II. The Navy justifies its continuing contractual relationship with the Applied Physics Lab on the Navy need to maintain essential engineering, research, and development capabilities at the Applied Physics Lab. The capabilities that the Navy wants to maintain at the Applied Physics Lab are shown in Appendix C. The aggregate value of the contracts awarded to the Applied Physics Lab from March 1942 through November 1994 is $7.6 billion. Contract N00039-91-C-0001, valued at $2 billion, expired on September 30, 1994. In November 1994, the Applied Physics Lab was noncompetitively awarded a 1-year follow-on contract (contract N00039-95-C-0002) with two 1-year option periods, valued at a total of $1.2 billion.

Administering Contracts With the Applied Physics Lab. The SPAWAR contracting officer delegated responsibility for the administration of contracts N00039-91-C-0001 and N00039-95-C-0002 to the Naval Technical Representative (NAVTECHREP) office at the Applied Physics Lab. For contract N00039-91-C-0001, the contracting officer included guidance in the contract that assigned six of the contract administration functions to the sponsors of task orders placed on the contract.

Contract administration is the process that ensures that contracts are performed in accordance with the terms and conditions of the contract, including contractor compliance in such areas as cost, delivery, technical requirements, quality, and timeliness. Within DoD, most contract administration functions were consolidated under the Defense Contract Management Command as required by Defense Management Report Decision 916, November 9, 1989. In June 1990, the Navy and the Defense Logistics Agency agreed to transfer the contract administration functions related to Vitro Corporation from the NAVTECHREP office to the Defense Contract Management Command. Contract administration functions related to the Applied Physics Lab were retained by the NAVTECHREP office. The mission of the NAVTECHREP office is to provide contract administration services on assigned contracts related to the procurement of materials and services; to provide Government representation with the Applied Physics Lab for the DoD Components, other Government agencies, and

foreign governments; and to provide technical liaison and direction for SPAWAR and other sponsors of research, development, test, and evaluation efforts at the Applied Physics Lab.

Audit Objectives

The overall audit objective was to evaluate policies and procedures at SPAWAR for awarding and administering the Navy research and development contract with the Applied Physics Lab. This report discusses policies and procedures for placing and monitoring task orders and administering contracts N00039-91-C-0001 and N00039-95-C-0002 with the Applied Physics Lab. We also evaluated the adequacy of the management control program as applicable to administering the contracts. See Appendix A for a discussion of the review of the management control program. The portion of the objective concerning the proposed award of a follow-on contract (contract N00039-95-C-0002) to the Applied Physics Lab and the management control program related to that portion of the objective were discussed in Inspector General, DoD, Report No. 95-001, "Navy Proposed Follow-On Research and Development Contract for Johns Hopkins University Applied Physics Laboratory," October 3, 1994. A summary of Report No. 95-001 is included in Appendix B.

Contract Administration

In contract N00039-91-C-0001, SPAWAR contracted with the Applied Physics Lab for research and development work in a manner that prevented effective contract administration. The ineffective contract administration occurred because neither the Federal Acquisition Regulation (FAR) nor SPAWAR provided adequate guidance to task sponsors for placing and monitoring task orders and administering the contract. Specifically, FAR and SPAWAR guidance did not:

o require program management or contracting officials at the agencies sponsoring the task orders to determine whether task orders should be noncompetitively awarded to the Applied Physics Lab based on a strategic relationship with the Applied Physics Lab for work that is within the essential capabilities that the Navy wants to maintain at the Applied Physics Lab,

o adequately emphasize that task sponsors were required to determine whether the resources and costs that the Applied Physics Lab proposed were necessary and reasonable,

o require task sponsors to document direction given to the Applied Physics Lab,

o make clear who was responsible for monitoring costs incurred by the Applied Physics Lab, or

o make clear the contract administration functions required of the task sponsors.

Additionally, the NAVTECHREP office was unable to effectively administer the contract because the SPAWAR contracting officer assigned certain administrative functions to the task sponsors and because of staffing reductions at the NAVTECHREP office. As a result, the Government had no assurance that the Applied Physics Lab was noncompetitively awarded only those task orders for which a strategic relationship existed for work that was within the essential capabilities that the Navy wanted to maintain at the Applied Physics Lab, that the costs that the Applied Physics Lab proposed and incurred were necessary and reasonable, and that all of the work ordered was within the scope of the contract.

SPAWAR Task-Order Contracts

SPAWAR Contracts With the Applied Physics Lab. Contract N00039-91-C-0001 was a noncompetitive, level-of-effort, task-order contract awarded to the Applied Physics Lab on behalf of task sponsors in DoD and other Government agencies. The contract did not establish precisely what work the Government expected from the contractor and what the work would cost. The contract contained a broad statement of work and left specific taskings to assignment description letters (task orders) that were prepared by the Applied Physics Lab and approved by the task sponsor. Contract N00039-91-C-0001 expired in September 1994 and was replaced in November 1994 by contract N00039-95-C-0002, another level-of-effort, task-order contract. Task-order contracts have been used by DoD contracting officers even though procedures for using the task-order contract are not addressed in the FAR. Contracting officers have entered into task-order contracts because of the convenience and flexibility provided when the users (task sponsors) do the ordering. Public Law 103-355, "Federal Acquisition Streamlining Act of 1994," October 13, 1994, included provisions authorizing Federal agencies to enter into task-order contracts.

Task-Order Processing. After discussions with the task sponsor, the Applied Physics Lab proposed a task order that defined the statement of work and identified estimated costs to perform the work. The Applied Physics Lab forwarded the task order to the task sponsor for review, approval, and funding. The task sponsor certified that the proposed resources (staff hours, labor skills mix, technical services, and subcontracts) were fair and reasonable and forwarded the task order and a funding document to SPAWAR. The SPAWAR contracting officer issued a contract modification under which the Applied Physics Lab performed work for the task sponsor. If additional direction was necessary to supplement a task order, the task sponsor provided the direction to the Applied Physics Lab. If the scope of work changed, the task order was modified.

SPAWAR to Continue Using Task-Order Contracts. In our Report No. 95-001 on the proposed follow-on contract for the Applied Physics Lab, we recommended that SPAWAR replace the task-order contract with a basic ordering agreement to eliminate the problems with awarding and administering task-order contracts. SPAWAR stated that it evaluated the advantages and disadvantages of using a basic ordering agreement and concluded that the advantages offered by a basic ordering agreement could also be achieved with a well structured task-order contract. Additionally, The Federal Acquisition Streamlining Act of 1994 provides general authority for the use of task order contracts. SPAWAR anticipates that the legislation will be reflected in the FAR before the next contract is awarded to the Applied Physics Lab. Recommendations in this report, if implemented, will improve procedures for placing task orders and administering contract N00039-95-C-0002 until guidance on awarding and administering task order contracts is included in the FAR and until SPAWAR replaces the contract with a more structured task-order contract.

Guidance for Placing Task Orders on Contracts With the Applied Physics Lab

The guidance that SPAWAR incorporated in contracts N00039-91-C-0001 and N00039-95-C-0002 did not require program management or contracting officials at the agencies sponsoring the task orders to determine whether proposed task orders should be noncompetitively awarded to the Applied Physics Lab. The decisions to make noncompetitive awards would be based on a strategic relationship between the Navy and the Applied Physics Lab for work that is within the essential capabilities approved for the Applied Physics Lab. The SPAWAR guidance required task sponsors to perform technical and cost element reviews of each task order proposed by the Applied Physics Lab. The reviews were to determine whether the work was adequately defined and whether the proposed personnel, technical services, subcontracts, and equipment purchases were necessary and whether costs were reasonable.

Determining Whether Task Orders Should Be Noncompetitively Awarded to the Applied Physics Lab. DoD task sponsors did not determine whether 31 task orders, valued at $170,864,000, of the 36 task orders we reviewed should have been noncompetitively awarded to the Applied Physics Lab based on a strategic relationship with the Applied Physics Lab for work that was within the essential capabilities approved for the Applied Physics Lab. National Aeronautics and Space Administration task sponsors obtained determinations from contracting officials that the Applied Physics Lab was the best qualified source to perform the other five task orders. The 36 task orders that we reviewed are listed in Appendix D by task sponsor. The DoD task sponsors for 31 of the 36 task orders made no effort to determine whether contractors other than the Applied Physics Lab could perform the work required by the task orders. The task sponsors stated that they placed the task orders with the Applied Physics Lab because the Navy contract was a convenient vehicle to get the work done or because they were following the existing practice of placing the task orders on the Navy contract.

Navy Encouraging Competition. The Navy has recently taken steps to encourage competitive award of some of the task orders being placed on the contract. In April 1995, the Navy identified six core capabilities to be maintained at the Applied Physics Lab and intends to reduce the essential capabilities in contract N00039-95-C-0002 from nine to six (Appendix C) to correspond with the six core capabilities. The Director of Defense Research and Engineering defines "core" as work that can only be performed by an organization that has a strategic relationship with its DoD sponsor. The Director defines a "strategic relationship" by the following characteristics:

- o No real or perceived biases or conflicts of interest
  - Unquestionable objectivity and independence

- o High quality and value of work
  - Recognized excellence of staff in core areas
  - Thorough familiarity with sponsor (issues, programs, technology).

The Navy also requested that nine non-Navy task sponsors initiate action to contract separately for task orders (valued at approximately $100 million annually) in FY 1996 because the work is not covered by the six core capabilities identified in April 1995. Additionally, the Navy set a goal to compete about $80 million of Navy tasks during FYs 1996 and 1997 and has identified 22 task orders that may be competitively awarded.

FAR part 35, "Research and Development Contracting," requires that Government agencies continually search for and develop information on other sources from the scientific and industrial communities who are competent to perform research and development work. Accordingly, SPAWAR should provide guidance to all task sponsors that requires the task sponsors to determine whether the work being considered for placement on the Navy contract should be competed. The task sponsors should forward to SPAWAR for noncompetitive award to the Applied Physics Lab only those task orders that are not desirable to compete because the task orders are for work that fits within the essential capabilities established in the contract and for work for which a strategic relationship exists between the Applied Physics Lab and the Navy. If the task sponsors make the determination to compete the other research and development work, they may pay less for the work because other contractors will be able to compete for the work and perhaps perform the work better and at less costs than the Applied Physics Lab.

Determining Whether Proposed Resources and Costs are Necessary and Reasonable. Although SPAWAR guidance required otherwise, the task sponsors for 33 of the 36 task orders that we reviewed accepted the resources and associated costs proposed by the Applied Physics Lab without determining whether the resources and costs were necessary and reasonable. The task sponsors stated that they reviewed the staff hours proposed by the Applied Physics Lab, but did not evaluate proposed costs. However, none of the 33 task sponsors could provide documentation of their reviews of the proposed staff hours. Of the 36 task sponsors, 29 task sponsors also stated that, because of funding limitations, they placed less money on the task orders than was proposed by the Applied Physics Lab. SPAWAR officials stated that, in July 1995, they began working with the Applied Physics Lab and the task sponsors in refining their cost estimates.

To encourage task sponsors to evaluate proposed resources and associated costs, SPAWAR should issue guidance that:

o reemphasizes that task sponsors are required to determine whether resources and costs proposed by the Applied Physics Lab are necessary and reasonable before signing the form letter that forwards the task orders to SPAWAR and

o certifies that the proposed resources are reasonable.

The guidance that already requires the reasonableness determination was not being followed.

Task sponsors should evaluate the resources and costs proposed for the task orders because the sponsors are knowledgeable of the technical requirements of the work and are better able than are SPAWAR contracting officials to determine whether the proposed resources and costs are necessary and reasonable. Additionally, deficiencies may exist in the Applied Physics Lab cost estimating system that make the Applied Physics Lab's proposed costs unreliable. Provisions in contract N00039-91-C-0001 exempted the Applied Physics Lab from disclosing its estimating system for proposals. The follow-on contract (N00039-95-C-0002), awarded in November 1994, does not include the exemption. On September 25, 1995, the Defense Contract Audit Agency issued an audit report that identified deficiencies in the Applied Physics Lab cost estimating system that may cause Applied Physics Lab proposals to be significantly overstated. That audit report recommended disapproval of the estimating system.

Guidance on Administering Contracts With the Applied Physics Lab

Neither the FAR nor SPAWAR provided adequate guidance to the NAVTECHREP office and to task sponsors on administering contracts N00039-91-C-0001 and N00039-95-C-0002. The guidance did not require task sponsors to document direction given to the Applied Physics Lab, and the written technical directions for one task order contained work that was outside the scope of the task order. The guidance was not clear on who was responsible for monitoring costs incurred by the Applied Physics Lab. Additionally, task sponsors were not aware that the contracting officer included guidance in contract N00039-91-C-0001 that required task sponsors to perform certain contract administration functions.

Documenting Direction to the Applied Physics Lab. The guidance in contracts N00039-91-C-0001 and N00039-95-C-0002 authorized task sponsors to communicate directions with respect to objectives of the task orders directly to the Applied Physics Lab. The guidance did not require that the direction be documented unless the direction changed the scope of work.

Because of reduced funding, 24 of the 36 task orders that we reviewed required revision to change the amount of work required. The task sponsors, however, did not document any revision. Of the other 12 task orders, 6 task orders did not require revision, 1 was not funded, and 5 were revised in writing to reflect reduced funding (Appendix D). The task orders were broad in scope. The task sponsors for the 24 task orders that required revision obligated substantially less money than the costs proposed by the Applied Physics Lab, but did not document changes to the work required by the task orders. The task sponsors stated that they discussed the task orders with officials at the Applied Physics Lab and provided verbal direction that revised the work required by the task orders. The task sponsors did not document the verbal direction.

Because the task sponsors had no records of the revised statements of work for the 24 task orders, we could not determine whether the Applied Physics Lab performed as expected and at a reasonable cost, whether the work that was performed was ordered, and whether the work ordered was within the scope of the contract. The problem was more pronounced when officials requesting the work left the sponsoring agency. Without documented technical direction, successor officials had no method and no direct knowledge to determine what specific work was ordered, whether the work was within the scope of the contract, and what the work was to cost.

Written Technical Direction to the Applied Physics Lab. After the award of the 36 task orders, 5 task sponsors provided written technical directions to the Applied Physics Lab. The written technical directions supplemented the broad statements of work in the task orders and documented the work that the contractor was asked to perform. The work required by the written technical direction for task order 13500-49 included work that was outside the scope of the task order.

Task order 13500-49 was for the Applied Physics Lab to develop for the Office of the Chief of Naval Operations methodologies and data bases that would facilitate effective management control of the transition of the existing Navy command, control, communication, computer, and intelligence system to a fully capable Space and Electronic Warfare system. However, the written technical direction and monthly financial statements submitted by the Applied Physics Lab showed that the work required by the technical direction was to improve Navy automated resource management systems and to provide training. The work involved integrating data bases, purchasing and installing software and computer equipment, entering and downloading data, attending meetings, providing training manuals, and providing training to Navy personnel on the Resource Allocation and Decision System and the Resource Allocation Programming System. The work required by the written technical direction was also outside the scope of the essential capabilities that the Navy wants to maintain at the Applied Physics Lab (Appendix C). Additionally, the work should not have been noncompetitively placed on the contract. Numerous contractors are capable of performing the work described in the written technical direction and may have competed with the Applied Physics Lab for the work. Task order 13500-49 expired in September 1994.

The SPAWAR contracting officer included a clause in contract N00039-95-C-0002 that requires that technical direction to the Applied Physics Lab be issued in writing by the contracting officer or the contracting officer's representative. Additionally, the Director, SPAWAR University Laboratory Management Office, who is responsible for providing technical direction with respect to the specifications and the statement of work, agreed during the audit to issue guidance that will require task sponsors to issue all revisions to task orders on contract N00039-95-C-0002 in writing. We believe that implementation of the contract clause and the Director's guidance will ensure that work assigned to the Applied Physics Lab is documented and that the assigned work is within the scope of the task order and the contract. Therefore, we are not including a recommendation regarding direction given to the Applied Physics Lab.

Monitoring Costs Incurred. Of 36 task orders we reviewed, the task sponsors for only 2 obtained cost information from the Applied Physics Lab to determine whether the Government received value for the costs incurred by the Applied Physics Lab. The sponsors for the other 33 task orders (1 task order was not funded) stated that monitoring costs incurred by the Applied Physics Lab was the responsibility of SPAWAR. The Applied Physics Lab provided to the administrative contracting officer and the contracting officer's technical representative monthly financial reports that showed summary information on funds available, funds committed, subcontracted amounts, and funds remaining. However, the financial reports did not show the level of effort expended and the work that the Applied Physics Lab accomplished. Task sponsors did not receive the financial reports.

The SPAWAR contracting officer and the director of the SPAWAR University Laboratory Management Office stated that they expected the task sponsors to monitor costs incurred by the Applied Physics Lab on their task orders. Task sponsors discussed the status of their task orders with officials at the Applied Physics Lab and, no doubt, were made generally aware of the costs incurred by the Applied Physics Lab. However, we found no evidence that the task sponsors were evaluating the costs incurred or matching the costs to deliverables and other progress made on the task orders. When we asked the task sponsors how much money was spent on their task orders, the task sponsors stated that they did not know, but that they could obtain the information for us from the Applied Physics Lab.

Confusion existed concerning who was monitoring costs incurred by the Applied Physics Lab. SPAWAR officials believed that the task sponsors were monitoring the costs incurred and the task sponsors believed that SPAWAR officials were monitoring the costs incurred. Guidance in contract N00039-91-C-0001 added to the confusion. FAR 42.302(a)(40) states that the contract administration office is responsible for performing engineering surveillance to assess compliance with contractual terms for schedule, costs, and technical performance in the areas of design, development, and production. The contract states that "to clarify NAVTECHREP's duties under FAR 42.302(a)(40), the task sponsor(s) has technical program management responsibility. NAVTECHREP shall provide surveillance to assess compliance with other contract terms." NAVTECHREP officials stated that, because the contract language required the task sponsors to monitor the costs incurred by the Applied Physics Lab on their task orders, the NAVTECHREP office could perform the monitoring function only if requested to do so by the task sponsors. The NAVTECHREP officials also stated that no task sponsor had requested the NAVTECHREP office to monitor costs incurred by the Applied Physics Lab.

The bills that the Applied Physics Lab submitted for payment also did not show actual costs at the task-order level. The Defense Contract Audit Agency completed a review of the Applied Physics Lab's billing system in March 1995. In a March 27, 1995, letter to the Applied Physics Lab, the branch manager, Defense Contract Audit Agency, Mid-Atlantic Region, District Branch Office, Landover, Maryland, stated that because tasks with identical accounting classification reference numbers are rolled up to the accounting classification reference number level, actual costs at the task-order level are lost. The branch

manager requested that future Applied Physics Lab billings show costs incurred at the task-order level. The administrative contracting officer at the NAVTECHREP office concurred with the branch manager's request and forwarded the request to the SPAWAR contracting officer recommending implementation.

We concluded that no one monitored the costs incurred by the Applied Physics Lab for the task orders issued under contract N00039-91-C-0001 and that Government officials did not know whether the cost of the work performed was reasonable. To ensure that task sponsors can monitor costs incurred, the SPAWAR contracting officer should modify contract N00039-95-C-0002 to require the Applied Physics Lab to submit to task sponsors and the contracting officer financial reports for each task order as deliverables under the contract. At a minimum, the financial reports should show total funds and total level of effort available, funds and level of effort expended for the month (or quarter) and year-to-date, subcontractor amounts, the balance of funds and level of effort remaining, and a summary of the work that the Applied Physics Lab accomplished during the reporting period. The Applied Physics Lab should submit the report as often as determined by the contracting officer, but no less than quarterly.

Performing Contract Administration Functions

Performance of Task Sponsors. Task sponsors were not performing the contract administration functions assigned to them by the contracting officer. The SPAWAR contracting officer for contract N00039-91-C-0001 included guidance in the contract that withheld six contract administration functions from the NAVTECHREP office and assigned the functions to the task sponsors. The guidance authorized the NAVTECHREP office to perform any of the six functions if requested to do so by the task sponsor. The six contract administration functions concerned evaluating contractor proposals, monitoring contractor performance, and monitoring contractor costs. Although task sponsors visited the Applied Physics Lab to discuss the status of their task orders, we found no evidence that the task sponsors routinely monitored contractor performance and costs. The task sponsors for the 36 task orders were not familiar with the contents of the contract and were not aware that guidance in the contract made task sponsors responsible for the six contract administration functions. The task sponsors did not request that the administrative contracting officer perform the functions and stated that they believed that SPAWAR was responsible for the contract administration functions. As a result, no one performed the six contract administration functions. The SPAWAR contracting officer resolved the problem by delegating all contract administration functions for contract N00039-95-C-0002 to the NAVTECHREP office.

Performance of the NAVTECHREP Office. The NAVTECHREP office was unable to effectively administer contract actions on contract N00039-91-0001 because six contract administration functions were withheld and assigned to the

task sponsors. Additionally, a procurement management review completed in April 1994 by the office of the Assistant Secretary of the Navy (Research, Development, and Acquisition), determined that staffing reductions at the NAVTECHREP office adversely affected the quality of subcontracting reviews. The review report recommended that SPAWAR perform a review to ensure that the NAVTECHREP office has sufficient staff to fulfill its work load. Also, the SPAWAR contracting officer and the technical director of the NAVTECHREP office stated that they were concerned that the NAVTECHREP office was not adequately staffed to administer contract N00039-95-C-0002. Staffing at the NAVTECHREP office had not increased, even though its contract administration functions increased when contract N00039-95-C-0002 was awarded on November 30, 1994.

In August 1995, the commanding officer, NAVTECHREP office, stated that after the award of contract N00039-95-C-0002, the NAVTECHREP office work load on consents to acquire facilities at Government expense had significantly decreased. The commanding officer further stated that upgraded computer systems and administrative changes within the NAVTECHREP office resulted in more productive work methods and improved ability of the NAVTECHREP office to provide contract administration services. We did not do the audit work necessary to determine whether improvements within the NAVTECHREP office after the award of contract N00039-95-C-0002 would eliminate concern over whether the NAVTECHREP office is adequately staffed to effectively administer the contract. The SPAWAR director of contracting stated that SPAWAR intends to perform a comprehensive staffing review of the NAVTECHREP office. SPAWAR initiated the review in the third quarter of FY 1995 and is expected to complete the review in the first quarter of FY 1996. As of July 28, 1995, the NAVTECHREP office was authorized 14 full-time personnel and had 16 personnel on board.

Contract Administration Services by the Defense Contract Management Command. In November 1989, Defense Management Report Decision 916 directed that contract administration performed by the Military Departments and the Defense Logistics Agency, except contract administration functions for Army Ammunition Plants and Navy Supervisors of Shipbuilding, be consolidated into a single organization. In February 1990, DoD established the Defense Contract Management Command to provide contract administration services. The mission of the Defense Contract Management Command is to provide worldwide contract administration services in support of the DoD Components, the National Aeronautics and Space Administration, and other designated Federal and international organizations.

Exclusions From Consolidation of Contract Administration Services. Although the Defense Federal Acquisition Regulation Supplement authorizes several additional exclusions from the general consolidation of contract administration services under the Defense Contract Management Command, including contracts for research and development with universities, the exclusions do not pertain to the Applied Physics Lab. The Applied Physics Lab functions as a viable entity, independent of Johns Hopkins University. Also, the Navy uses cost principles for commercial organizations, rather than cost principles for educational institutions, to determine costs allowable under its

contracts with the Applied Physics Lab. We were unable to determine why the Navy and the Defense Logistics Agency agreed that the Navy would retain responsibility for administration of contracts with the Applied Physics Lab after the Defense Contract Management Command was established because documentation concerning the decision was not available at either SPAWAR or the Defense Contract Management Command.

Defense Management Report Decision 916 Objectives. The decision that the Navy retain contract administration responsibility interferes with achievement of at least four of the nine objectives stated in Defense Management Report Decision 916. The four objectives interfered with and explanations follow.

Consolidation of Contract Administration Functions. Contract administration functions were to be consolidated under one organization, the Defense Contract Management Command. The Navy retaining contract administration does not support that objective.

Standardization of Contract Administration Policy and Procedures. All Defense Contract Management Command facilities operate under uniform contract administration policies and procedures. NAVTECHREP office personnel use Defense Contract Management Command handbooks and manuals as guides, but they use them to develop their own procedures for performing the contract administration functions described in the FAR and do not follow Defense Contract Management Command procedures.

Preservation of the Division Between Contract Administration Functions and Procurement Functions. To prevent an activity from having total control over the contract, contract administration functions are kept separate from procurement functions. The Defense Contract Management Command works for the Director, Defense Logistics Agency, and is independent of SPAWAR. However, because both the procuring contracting officer at SPAWAR and the administrative contracting officer at the NAVTECHREP office work for SPAWAR, functions are not kept separate.

Improvement of Management Controls Over Contract Administration. The Defense Contract Management Command has developed process management controls that provide standardized methods for measuring cost effectiveness, quality, and timeliness of each contract administration process. The NAVTECHREP office did not have similar controls, and some contract administration functions (processes) were not performed for contract N00039-91-C-0001.

Performing Contract Administration Services for Contracts With the Applied Physics Lab. We discussed with Defense Contract Management Command officials the feasibility of the Defense Contract Management Command performing contract administration services for contract N00039-95-C-0002 with the Applied Physics Lab. The Defense Contract Management Command officials reviewed the contract and a sample of the task orders assigned to the Applied Physics Lab. The Defense Contract Management Command officials concluded that nothing was extraordinary about the contract

that would preclude the Defense Contract Management Command from performing basic contract administration services. The officials stated that the potential technical role for the Defense Contract Management Command would require an assessment of the specific functions performed by the NAVTECHREP office engineers and quality control specialist.

We believe that the contract administration functions, including technical functions, performed by the NAVTECHREP office are within the mission and capabilities of the Defense Contract Management Command. To comply with Defense Management Report Decision 916, and to ensure that contract N00039-95-C-0002 and future contracts and agreements with the Applied Physics Lab are administered by an organization that is independent of SPAWAR, the Defense Contract Management Command should perform contract administration. SPAWAR should initiate action to transfer responsibility for contract administration from the NAVTECHREP office to the Defense Contract Management Command.

Summary

The Navy contracted with the Applied Physics Lab in a manner that prevented effective contract administration. The FAR does not provide guidance for task order contracts, and the Navy did not provide adequate guidance to task sponsors for placing orders and administering task order contracts with the Applied Physics Lab. Additionally, the task order contracts that SPAWAR awarded to the Applied Physics Lab did not establish precisely what work the Government expected from the contractor and what the work would cost. Task sponsors noncompetitively assigned task orders to the Applied Physics Lab and verbally modified the task orders without documenting the changes. Also, task sponsors did not determine whether the costs proposed by the Applied Physics Lab were necessary and reasonable. Consequently, the Government had no assurance that the task orders awarded to the Applied Physics Lab were based on a strategic relationship between the Navy and the Applied Physics Lab for work that was within the essential capabilities approved for the Applied Physics Lab. Also, Government officials could not verify what work the Government ordered, whether the contractor performed the work at reasonable costs, or whether the work ordered was within the scope of the contract. Additionally, assignment of contract administration responsibilities to the NAVTECHREP office interferes with full achievement of the objectives of Defense Management Report Decision 916 by DoD. The Navy has included provisions in contract N00039-95-C-0002 and has initiated actions that will improve the procedures for placing task orders and administering the contract. Implementation of the recommendations in this report will complement the SPAWAR efforts.

Management Comments on the Finding and Audit Response

Navy Comments. The Navy generally agreed with the finding. The Navy disagreed that task sponsors should determine that the Applied Physics Lab is the best qualified or the only qualified contractor to perform task orders before forwarding the task orders to SPAWAR for noncompetitive award to the Applied Physics Lab. The Navy stated that task sponsors should propose for noncompetitive award only task orders that are based on a strategic relationship with the Applied Physics Lab for work that is within the approved core capabilities of the Applied Physics Lab.

Additionally, the Navy disagreed that only 2 of the 36 sponsors obtained cost information to determine whether the Government received value for the costs incurred by the Applied Physics Lab. The Navy stated that SPAWAR queried a limited number of task sponsors and found that the extent of sponsor monitoring of cost and performance by the Applied Physics Lab is significantly greater than indicated by the Inspector General, DoD, draft audit report. The Navy provided the following examples of cost monitoring by task sponsors.

o The financial officer for task order 13500-20 conducts monthly reviews of incurred costs for personnel, material, and subcontracting, in addition to regularly scheduled technical reviews.

o The program sponsor for task order 13500-28 conducts formal reviews quarterly with fiscal status, expenditure rates, fund balances, and critical management issues discussed in detail.

o The program sponsor for task order 13500-14 conducts technical and cost reviews at 4-month intervals, and the Applied Physics Lab provides expenditure reports periodically.

The Navy agreed that procedures for monitoring of costs by task sponsors need to be reinforced and stated that the Navy will clarify task sponsor review responsibilities and incorporate uniform cost reporting requirements in the contract with the Applied Physics Lab.

Audit Response. Based on the Navy comments, we changed the finding to state that task sponsors should forward to SPAWAR for noncompetitive award to the Applied Physics Lab only task orders for which a strategic relationship exists with the Applied Physics Lab for work that is within the essential capabilities that the Navy wants to maintain at the Applied Physics Lab. We deleted the statement that task sponsors should determine whether the Applied Physics Lab is the best qualified or the only qualified contractor to perform the task orders.

We disagree with the Navy that task sponsor monitoring of costs and performance by the Applied Physics Lab is significantly greater than stated in the audit report. The report acknowledges that task sponsors discussed their task orders with officials at the Applied Physics Lab and were made generally aware of the costs incurred by the Applied Physics Lab. The report further

states that the task sponsors provided no evidence that they evaluated the costs incurred or matched the costs to deliverables or other progress made on the task orders. The Navy comments contained no new evidence that the Applied Physics Lab provided financial reports containing information on funding data, level of effort expended, and work accomplished--all needed by task sponsors to properly evaluate costs incurred--or that the task sponsors matched the costs to deliverables or other progress made on the task orders. The Navy plan to issue guidance on cost monitoring procedures to task sponsors and to incorporate uniform cost reporting requirements in the contract with the Applied Physics Lab should ensure proper monitoring of costs incurred by the Applied Physics Lab.

Recommendations, Management Comments, and Audit Response

We recommend that the Commander, Space and Naval Warfare Systems Command:

1. Issue guidance that requires task sponsors to determine whether the research and development work being considered for placement on contract N00039-95-C-0002 should be competed. The task sponsors should forward to the Space and Naval Warfare Systems Command for noncompetitive award to the Applied Physics Laboratory only those task orders that the task sponsors determine should not be competitively awarded. Task sponsors should select for noncompetitive award only the task orders that are for work that is within the essential capabilities established in the contract and work for which a strategic relationship exists between the Navy and the Applied Physics Laboratory.

Navy Comments. The Navy concurred, stating that individual task sponsors should make an affirmative determination or certification as to whether task orders should be awarded non-competitively to maintain essential capabilities at the Applied Physics Lab before forwarding the task orders to the Space and Naval Warfare Systems Command. The Navy is working closely with the Director of Defense Research to develop clear definitions of core work. Such definitions would aid in determining proper taskings for University Affiliated Research Centers, including the Applied Physics Laboratory, and in developing a Management Plan for University Affiliated Research Centers to better control task orders in the future. The Navy intends to issue to all task sponsors by February 1996 guidance on task orders that is consistent with the Management Plan for University Affiliated Research Centers.

2. Issue guidance that reemphasizes that task sponsors are required to determine whether the resources and associated costs proposed by the Applied Physics Laboratory for task orders are necessary and reasonable before signing the form letter that forwards the task order to the contracting officer for placement on the contract.

Navy Comments. The Navy concurred, stating that it is updating its guidance to task sponsors on the requirement for task sponsors to review proposed resources and associated costs. The Navy is also revising task sponsor certifications to require task sponsors to determine whether costs are fair and reasonable. The Navy intends to issue the revised guidance and certifications by February 29, 1996.

3. Modify contract N00039-95-C-0002 to require that the Applied Physics Laboratory submit to task sponsors monthly or quarterly financial reports, as deliverables under the contract. The financial reports should show total funds authorized, total level of effort authorized, funds and level of effort expended for the month or quarter and year-to-date, subcontractor amounts, balance of funds and level of effort remaining, and a brief summary of the work that the Applied Physics Laboratory accomplished during the reporting period. The Applied Physics Laboratory should submit the financial report no less than quarterly.

Navy Comments. The Navy concurred, stating that it is working with task sponsors to establish uniform financial reports that meet the needs of the Navy and the task sponsors. The Navy anticipates that a uniform cost reporting requirement will be negotiated with the Applied Physics Laboratory and incorporated into contract N00039-95-C-0002 by June 28, 1996.

4. Transfer responsibility for contract administration from the Naval Technical Representative office to the Defense Contract Management Command.

Navy Comments. The Navy partially concurred, stating that there may be functions that can be transferred to the Defense Contract Management Command. The Space and Naval Warfare Systems Command will conduct a Command Inspection of the Naval Technical Representative office, including a review of staffing and functions performed. A final decision on the transfer of contract administration functions will depend on the results of the Command Inspection and on discussions with the Defense Contract Management Command. The decision may also be affected by the planning for the relocation of the Space and Naval Warfare Systems Command to San Diego, as required by the Base Closure and Realignment Commission. The Navy intends to make a decision on whether to transfer contract administration functions from the Naval Technical Representative office to the Defense Contract Management Command by June 28, 1996.

Audit Response. Although the Navy only partially concurred with the recommendation, the action the Navy is taking before making a final decision on transferring contract administration functions from the Naval Technical Representative office to the Defense Contract Management Command is responsive to the intent of the recommendation.

Part II - Additional Information

Appendix A. Scope and Methodology

Audit Scope

Limitation to Audit Scope. For the purpose of this report, we are covering only the portion of the overall audit objective that concerns placing and monitoring task orders and administering Navy contracts with the Applied Physics Lab.

Universe and Sample. The audit universe consisted of SPAWAR contracts N00039-91-C-0001 and N00039-95-C-0002 with the Applied Physics Lab and the 286 associated task orders issued during FY 1993 under contract N00039-91-C-0001. We judgmentally selected 55 of the 286 task orders for the audit sample. During the audit, we limited our review of task orders to 36 because we found that task sponsors maintained little documentation concerning the task orders, and visiting the task sponsors for the remaining 19 of the 55 task orders in the audit sample would not be cost-effective.

The 36 task orders we reviewed were sponsored by the Army, the Navy, the Air Force, the Office of the Secretary of Defense, the Ballistic Missile Defense Organization, the National Security Agency, and the National Aeronautics and Space Administration. The task orders were awarded during FY 1993 and were valued at $177.3 million.

Audit Methodology

Documents Reviewed. At SPAWAR, at the task sponsors listed in Appendix D, and at the NAVTECHREP and Defense Contract Audit Agency resident offices at the Applied Physics Lab, we obtained task orders, task order deliverables, funding documents, contract file documents, and reports concerning administration of the Navy contracts with the Applied Physics Lab. We examined the documents to determine whether the contracts were being effectively administered in accordance with FAR part 42, "Contract Administration." We also interviewed cognizant procurement, contract administration, and program officials at SPAWAR, task sponsor activities, and the NAVTECHREP office concerning placing and administering task orders assigned to the Applied Physics Lab under the Navy contracts. We did not use computer-processed data to conduct this audit.

Audit Period, Standards, and Locations. We performed this economy and efficiency audit from July 1994 through July 1995 in accordance with auditing standards issued by the Comptroller General of the United States, as

implemented by the Office of the Inspector General, DoD. Accordingly, we included a review of management controls considered necessary. Appendix F lists the organizations visited or contacted during the audit.

Management Control Program

DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. We reviewed the adequacy of management controls at SPAWAR and the NAVTECHREP office over the administration of contracts N00039-91-C-0001 and N00039-95-C-0002 with the Applied Physics Lab. We did not assess the adequacy of management's self-evaluations of those controls.

Adequacy of Management Controls. The management controls over contract administration at SPAWAR and the NAVTECHREP office were adequate as they applied to the overall audit objective. As discussed in the finding, certain contract administration functions were not performed because task order contracts are not covered in the FAR and because guidance that the SPAWAR contracting officer included in the contracts was not adequate, not because of any identified material weaknesses in established management controls over contract administration.

Appendix B. Prior Audits and Other Reviews

General Accounting Office Report

General Accounting Office Report No. NSIAD-95-19 (OSD Case No. 97-15), "University Research: U.S. Reimbursement of Tuition Costs for University Employee Family Members," February 15, 1995, states that of the 65 universities surveyed by the Department of Health and Human Services and the Office of Naval Research, 51 universities (78 percent) provided tuition assistance for employee family members. Dependent tuition assistance was made an unallowable cost for commercial contracts because the Government did not benefit from subsidizing tuition costs of employee family members, and because such costs are by their very nature discriminatory and potentially counterproductive because childless or unmarried employees might resent the program. Dependent tuition assistance was allowed by Office of Management and Budget Circular No. A-21, "Cost Principles for Educational Institutions," for universities because academic salaries were generally lower than the salaries paid by commercial and not-for-profit concerns. Tuition assistance was just one of a number of benefits made available to university staff to compensate for lower salaries.

The report states that 4 of the 5 universities visited by the General Accounting Office recorded costs of about $53 million for tuition assistance to employee family members and charged about $17 million, or 32 percent, of the costs to Government research contracts and grants. The report identifies the Government dependent tuition assistance costs for the four universities as Massachusetts Institute of Technology (including Lincoln Laboratory), $7.1 million; Stanford University (including Stanford Linear Accelerator Center), $3.6 million; Johns Hopkins University (including the Applied Physics Lab), $3.7 million; and the University of Chicago (including Argonne National Laboratory), $2.5 million. The report states that Johns Hopkins University operates the Applied Physics Lab under Federal Acquisition Regulation provisions that make tuition costs for employee family members unallowable. The estimated $3.7 million Government share of Johns Hopkins University tuition assistance costs represents only the portion of tuition costs that are attributable to the university.

The report made no recommendations, and the Office of Management and Budget did not question the accuracy of the report. On February 6, 1995, the Office of Management and Budget published in the Federal Register a proposed change to Office of Management and Budget Circular No. A-21 to make

unallowable the charges for tuition benefits for any person other than the employee. The proposed change is to take effect for educational institutions after September 30, 1997.

Inspector General, DoD, Reports

Report No. 95-143. "Audit of Hotline Complaint on Management of the Cooperative Engagement Capability Program," was issued March 10, 1995, by the Office of the Inspector General, DoD. The report states that the Cooperative Engagement Capability program office had inadequate controls to manage and develop the program effectively and could not ensure that the Applied Physics Lab provided fair and reasonable contract prices. Additionally, the Cooperative Engagement Capability program office could not measure the Applied Physics Lab's performance against contract cost, schedule and performance requirements and was not planning to operationally test production equipment before fielding it. The report also states that the Navy cannot verify the Cooperative Engagement Capability Program's operational effectiveness and suitability through operational testing before the planned initial operational capability date. The report recommended that the Navy award a separate contract for the engineering and manufacturing phase of the acquisition process and incorporate cost or pricing data requirements into the contract. The report also recommended that the Cooperative Engagement Capability program manager submit the Test and Evaluation Master Plan to the Director, Test, Systems Engineering and Evaluation, for review and approval and that the Navy request Congress extend the initial operational capability date so that the attainment of initial operational capability can be based on an operational test of production representative equipment. The Navy agreed to develop a separate contract that reflects the program structure and that complies with cost or pricing data requirements. Additionally, the Navy has submitted a revised Test and Evaluation Master Plan for the Cooperative Engagement Capability program to the Director, Test, Systems Engineering and Evaluation, for approval.

Report No. 95-001. "Navy Proposed Follow-On Research and Development Contract for Johns Hopkins University Applied Physics Laboratory," October 3, 1994. The report states that, as a result of the absence of competition and the absence of a recent evaluation of the fee paid to the Applied Physics Lab, the Navy may be paying more for the services procured from the Applied Physics Lab than necessary and may be denying other qualified contractors the opportunity to compete for the work awarded sole-source to the Applied Physics Lab. The report recommended that the Navy clearly define the essential capabilities that it wants to maintain at the Applied Physics Lab and that the Navy demonstrate that the Applied Physics Lab is uniquely qualified to provide those capabilities. The report recommended that the Navy determine whether sources other than the Applied Physics Lab are capable of providing the services being procured from the Applied Physics Lab. The report further

recommended that the Navy prepare a basic ordering agreement to replace the task order contract with the Applied Physics Lab and reassess the fee arrangement with the Applied Physics Lab. The Navy agreed to conduct a study to determine whether the Applied Physics Lab is uniquely qualified to perform certain services and whether other organizations could provide the services obtained from the Applied Physics Lab. The Navy determined that the nine essential capabilities being maintained at the Applied Physics Lab could be reduced to six and identified 22 Navy task orders that it may be possible to competitively award. The Navy also requested that nine non-Navy task sponsors contract separately for their work in FY 1996. The Navy evaluated the advantages and disadvantages of replacing the task order contract with a basic ordering agreement and concluded that use of a well-structured task-order contract is more administratively efficient and in the best interest of DoD and the Applied Physics Lab. Additionally, the Navy agreed to assess the fee paid to the Applied Physics Lab and included a use-of-fee clause in the follow-on contract for the Applied Physics Lab.

Report No. 86-062. "Audit of Federal Research Centers and Not-for-Profit Corporations," February 4, 1986. The report discusses the adequacy of policy regarding the levels and uses of reserves accumulated from fees and investments at seven contractor sites, including the Applied Physics Lab. The report states that the Navy was providing the Applied Physics Lab with $14.5 million in an advance payment pool to fund the contractor while awaiting processing of the semimonthly public voucher submitted to the Navy, although the contractor's reserves could easily accommodate its entire cash needs. The report recommended that the Navy revoke its advance payment pool agreement with the Applied Physics Lab. The Navy no longer makes advanced payments to the Applied Physics Lab.

Report of the Under Secretary of Defense (Acquisition and Technology) Process Action Team

The report issued by the Under Secretary of Defense (Acquisition and Technology) Process Action Team, "Contract Administration Reform," February 1995, includes a chapter on program management technical representatives assigned to contractor facilities where the Defense Contract Management Command has a resident office. The report states that the technical representatives performed tasks that overlapped with the contract administration tasks performed by the Defense Contract Management Command resident offices. The technical representatives and the Defense Contract Management Command resident offices used the same data to perform related analysis for ostensibly independent program management and contract administration functions. The report states that Navy rationale for having technical representatives at contractor facilities includes the belief by program managers that technical representatives are an extension of the program office and that others could not provide adequate technical oversight unless they were

working for the program office. Also, Defense Contract Management Command resident offices are usually responsible for several programs at a contractor facility and the Defense Contract Management Command moves its people around. The report further states that the Defense Contract Management Command is committed to providing excellent on-site technical representatives for program managers and that, when the support is unacceptable, program managers should promptly notify the Defense Contract Management Command so the problem can be fixed rather than work around the unacceptable support. The report also states that the program support teams that the Defense Contract Management Command has in place for some programs are de facto extensions of the program offices. To prevent duplication of effort, the report recommends that the Defense Contract Management Command's program support responsibilities be addressed in detail in DoD Instruction 5000.2, and that the program manager and the Defense Contract Management Command jointly develop program support plans and review the placement of technical representatives in contractor facilities. When duplication exists, the technical representatives should be eliminated. The Under Secretary approved the recommendations for implementation on March 3, 1995.

The Process Action Team's report did not discuss the NAVTECHREP office at Johns Hopkins University Applied Physics Lab because the Defense Contract Management Command does not have a resident office at the Applied Physics Lab and because contract administration was assigned to the NAVTECHREP office. However, the issues discussed in the Process Action Team report and in this audit report are related. We concluded that the contract administration functions, including technical functions, performed by the NAVTECHREP office are within the mission and capabilities of the Defense Contract Administration Command and that the Navy should transfer responsibility for administering contracts with the Applied Physics Lab from the NAVTECHREP office to the Defense Contract Management Command.

Assistant Secretary of the Navy (Research, Development, and Acquisition) Report

"Report on Procurement Management Review of Space and Naval Warfare Systems Command," was issued April 20, 1994, by the Assistant Secretary of the Navy (Research, Development, and Acquisition). The report states that the fee paid to the Applied Physics Lab is based on costs incurred, but that no mechanism in contract N00039-91-C-0001 ensures that the Government receives the contracted level of effort. The report also states that the Applied Physics Lab's subcontracting tends to procure Federal information processing equipment by specific make and model specification, and that the appropriateness of that practice should be included in the SPAWAR review of the Applied Physics Lab's purchasing system then scheduled for the spring of 1994. The report further states that staffing reductions at the Naval Technical Representative Office adversely affected the quality of subcontracting reviews. The report

states that no incidents of bad decisions were found, but that the pace of subcontract submissions and the number of nonexpert reviews are concerns. The report recommended that SPAWAR ensure that fee payments to the Applied Physics Lab are derived from levels of effort incurred or deliverables received, that SPAWAR help the NAVTECHREP office to review the Applied Physics Lab's purchasing system, and that SPAWAR perform a review to ensure that the NAVTECHREP office has sufficient staffing to fulfill its work load. SPAWAR initiated a comprehensive review of the staffing at the NAVTECHREP office in the third quarter of FY 1995. SPAWAR anticipated that the review would be completed in the first quarter of FY 1996.

Appendix C. Essential Capabilities That the Navy Wants to Maintain at the Applied Physics Lab

The SPAWAR contracting officer identifies the essential capabilities that the Navy wants to maintain at the Applied Physics Lab in the research and development contracts that SPAWAR awards to the Applied Physics Lab. The nine essential capabilities identified in the current contract, N00039-95-C-0002, follow.

1. Conduct independent quantitative performance evaluations for operational fleet ballistic missile systems and related command, control, and communication systems; formulate recommendations for corrective action and system improvements; specify requisite data collection and instrumentation requirements; and evaluate or provide instrumentation as appropriate.

2. Investigate and assess all technologies relevant to the continuing survivability of U.S. Navy submarines and develop countermeasures as necessary; plan and conduct requisite at-sea experiments and evaluate or provide instrumentation as appropriate; apply resulting capabilities to tactical antisubmarine warfare; and carry out oceanographic research.

3. Conceive, design, and prototype space systems and instruments for precision tracking, location, and navigation systems and for communications; establish relevant aspects of the space environment; conduct critical space experiments as appropriate; and accomplish remote sensing of the earth's surface.*

4. Provide the detailed understanding of guided missile system design requisite to the independent evaluation of current systems and the development of concepts and techniques for system improvement, with emphasis on surface-to-air and cruise missile systems; maintain unique evaluation and development facilities; conceive, design, and prototype systems as appropriate; and relate systems design to operational factors, including targeting and mission planning.

5. Evaluate shipboard combat system capabilities and deficiencies, conceive and develop solutions to systems problems, and conduct related analyses and tests.

6. Evaluate the effectiveness of methods for coordinating warfare systems at the single- and multi-platform level by exploring system concepts, developing demonstration models, and conducting experiments and assist in the planning and evaluation of tactical command, control, and communication systems for the achievement of regional and global system capabilities.

*Identified by SPAWAR for removal from essential capabilities listed in contract N00039-95-C-0002.

7. Provide engineering-level interpretation of technical intelligence information. Employ relevant data in the processes of systems engineering and evaluation of electronic warfare; guided missile weapon and combat systems; command, control, and communication systems; ballistic and cruise missile systems; underwater warfare systems; and space systems.*

8. Develop and apply simulations and models and operations analysis techniques for the engineering evaluation and performance assessment for current, planned, and proposed systems and methods for coordinated employment of systems.

9. Conduct mission-related, public-service-oriented research and technology development consistent with the foregoing essential capabilities.*

*Identified by SPAWAR for removal from essential capabilities listed in contract N00039-95-C-0002.

Appendix D. Task Orders by Task Sponsors

Sponsor	Task Order	Proposed Amount	Award Amount
Assistant Secretary of the Army (Research, Development, and Acquisition)	13500-114[1]	$ 400,000	$ 400,000
Program Executive Officer (Command, Control, and Communications)	13500-40[1]	4,900,000	4,900,000
	13599[1]	600,000	600,000
Commander, Army Communications-Electronics Command	13500-45[2]	5,000,000	3,220,000
Chief of Naval Operations	13500-37[3]	120,000	0
	13500-47[2]	3,048,000	2,632,000
	13500-49[4]	417,000	280,000
Assistant Secretary of the Navy (Research, Development, and Acquisition)	13500-94[2]	17,900,000	13,112,926
Naval Air Systems Command	13500-96[2]	2,100,000	1,650,000
Naval Sea Systems Command	13500-7[4]	570,000	243,000
	13500-14[2]	16,621,000	8,388,397
	13500-15[2]	10,000,000	6,908,400
	13500-16[4]	1,915,000	1,258,284
	13500-17[2]	300,000	207,000
	13500-20[2]	27,000,000	22,388,140
	13500-21[1]	3,100,000	3,100,000
	13500-22[2]	4,000,000	3,100,000
	13500-27[2]	3,380,000	3,236,000

Note: See the footnotes at the end of the appendix.

Appendix D. Task Orders by Task Sponsors

Sponsor	Task Order	Proposed Amount	Award Amount
Naval Sea Systems Command (Cont'd)	13500-28[1]	$ 3,600,000	$ 3,600,000
	13500-30[2]	5,751,000	1,016,000
	13500-31[1]	8,815,000	8,815,000
	13500-148[2]	10,800,000	9,984,000
	13608[2]	1,000,000	450,000
SPAWAR	13500-119[2]	2,500,000	1,000,000
Office of Naval Research	13500-82[2]	300,000	225,000
Air Force Aeronautical Systems Center	13500-107[2]	1,675,000	911,000
	13500-5[2]	2,875,000	2,115,000
Air Force Studies and Analysis Agency	13500-98[4]	400,000	15,000
Ballistic Missile Defense Organization	13500-54[2]	30,027,000	29,549,000
National Security Agency	13500-115[2]	1,500,000	923,286
	13730[2]	250,000	100,000
National Aeronautics and Space Administration	13500-58[4]	1,350,000	850,000
	13500-62[2]	446,000	345,000
	13500-68[2]	2,374,000	1,774,000
	13500-78[2]	225,000	50,000
	13624[2]	2,000,000	1,800,000
Total		**$177,259,000**	**$139,146,433**

[1]Did not require revision.

[2]Required revision to reflect reduced funding, but did not document revision.

[3]Not funded.

[4]Revised in writing to reflect reduced funding.

Appendix E. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Type of Benefit
1.	Economy and Efficiency. Improves probability that additional qualified sources will be identified and some task orders will be competitively awarded.	Undeterminable. The amount depends on the number of task orders that are competitively awarded.
2.	Management Controls and Economy and Efficiency. Increases the probability that proposed costs that are unnecessary or unreasonable will be detected.	Undeterminable. The amount depends on management's evaluations and negotiations of proposed costs.
3.	Management Controls. Provides task sponsors with data needed to effectively monitor costs incurred and work performed by the contractor.	Nonmonetary.
4.	Management Controls. Provides for independent contract administration. Transfers responsibility for contract administration to the DoD organization established to administer DoD contracts.	Nonmonetary.

Appendix F. Organizations Visited or Contacted

Office of the Secretary of Defense

Director, Defense Procurement, Washington, DC
Defense Acquisition Regulations Council, Washington, DC

Department of the Army

Assistant Secretary of the Army (Research, Development, and Acquisition), Washington, DC
Communications-Electronics Command, Fort Monmouth, NJ
Program Executive Officer (Command, Control, and Communications), Fort Monmouth, NJ

Department of the Navy

Chief of Naval Operations (Op-094E), Washington, DC
Assistant Secretary of the Navy (Research, Development, and Acquisition), Washington, DC
Naval Air Systems Command, Arlington, VA
Naval Sea Systems Command, Arlington, VA
Space and Naval Warfare Systems Command, Arlington, VA
Naval Technical Representative Office, Johns Hopkins University, Applied Physics Laboratory, Laurel, MD
Office of Naval Research, Arlington, VA

Department of the Air Force

Aeronautical Systems Center, Wright-Patterson Air Force Base, OH
Air Force Studies and Analysis Agency, Washington, DC

Other Defense Organizations

Ballistic Missile Defense Organization, Washington, DC
Defense Contract Audit Agency, Alexandria, VA
  Mid-Atlantic Regional Office, Philadelphia, PA
    District Branch Office, Landover, MD
      SubOffice, Johns Hopkins University Applied Physics Laboratory, Laurel, MD
Defense Contract Management Command, Alexandria, VA
National Security Agency, Fort George G. Meade, MD

Non-Defense Federal Organization

National Aeronautics and Space Administration, Washington, DC

Appendix G. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
  Director, Defense Procurement
  Deputy Under Secretary of Defense (Acquisition Reform)
  Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
  Deputy Comptroller (Program/Budget)
Director, Defense Research and Engineering
Assistant to the Secretary of Defense (Public Affairs)

Department of the Army

Assistant Secretary of the Army (Research, Development, and Acquisition)
Auditor General, Department of the Army
Commander, Communications-Electronics Command
Program Executive Officer (Command, Control, and Communications)

Department of the Navy

Chief of Naval Operations
Assistant Secretary of the Navy (Financial Management and Comptroller)
Assistant Secretary of the Navy (Research, Development, and Acquisition)
Auditor General, Department of the Navy
Commander, Naval Air Systems Command
Commander, Naval Sea Systems Command
Commander, Space and Naval Warfare Systems Command
  Commanding Officer, Naval Technical Representative Office,
    Johns Hopkins University Applied Physics Laboratory
Chief of Naval Research

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Department of the Air Force (cont'd)

Commander, Aeronautical Systems Center
Commander, Air Force Studies and Analysis Agency

Other Defense Organizations

Director, Ballistic Missile Defense Organization
Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
  Commander, Defense Contract Management Command
Director, National Security Agency
  Inspector General, National Security Agency

Non-Defense Federal Organizations

Office of Management and Budget
Administrator, National Aeronautics and Space Administration
  Inspector General, National Aeronautics and Space Administration
Technical Information Center, National Security and International Affairs Division, General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

  Senate Committee on Appropriations
  Senate Subcommittee on Defense, Committee on Appropriations
  Senate Committee on Armed Services
  Senate Committee on Governmental Affairs
  House Committee on Appropriations
  House Subcommittee on National Security, Committee on Appropriations
  House Committee on Government Reform and Oversight
  House Subcommittee on National Security, International Affairs, and Criminal Justice, Committee on Government Reform and Oversight
  House Committee on National Security

Part III - Management Comments

Department of the Navy Comments

THE ASSISTANT SECRETARY OF THE NAVY
(Research, Development and Acquisition)
WASHINGTON, D.C. 20350-1000

NOV 27 1995

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR GENERAL FOR AUDITING

Subj: DRAFT REPORT ON THE AUDIT OF NAVY RESEARCH AND DEVELOPMENT CONTRACT FOR JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY (PROJECT NO. 4CH-5006.01)

Ref: (a) DoDIG Memo of 8 September 1995

Encl: (1) DON Response to Draft Audit Report

I am responding to the draft audit report forwarded by reference (a) concerning Navy procedures for placing and monitoring task orders and administering contracts with the Johns Hopkins University Applied Physics Laboratory.

The Department of the Navy response is provided at enclosure (1). We generally agree with the draft report findings and recommendations. As outlined in the enclosed comments, the Department has taken, or is planning to take specific actions to ensure adequate management controls are provided on these contracts in the future. We have been working very closely with the Director of Defense Research and Engineering to develop clear definitions of core work for use in determining proper taskings for University Affiliated Research Centers, which includes the Johns Hopkins University Applied Physics Laboratory. We are now in the process of developing a Management Plan for better control of these taskings in the future. The draft report recommendations are generally consistent with our on-going efforts.

At this time, we only partially agree with the recommendation to transfer contract administration functions from the Naval Technical Representative Office to the Defense Contract Management Command (DCMC). A final decision on this matter will depend on the results of an imminent Command Inspection of that office and on discussions with DCMC.

John W. Douglass

Copy to:

NAVINSGEN
FMO-31

Final Report Reference

Department of the Navy Response

to

DODIG Draft Report of September 8, 1995

on

Navy Research and Development Contract for Johns Hopkins University Applied Physics Laboratory Project No. 4CH-5006.01

Finding:

In contract N00039-91-C-0001, SPAWAR contracted with the Applied Physics Lab for research and development work in a manner that prevented effective contract administration. The ineffective contract administration occurred because neither the Federal Acquisition Regulation (FAR) nor SPAWAR provided adequate guidance to task sponsors for placing and monitoring task orders and administering the contract. Specifically, FAR and SPAWAR guidance did not:

Revised

- require program management or contracting officials at the agencies sponsoring the task orders to determine whether the Applied Physics Lab was the best qualified or the only qualified contractor that could perform the task orders,
- adequately emphasize that task sponsors were required to determine whether the resources and costs that the Applied Physics Lab proposed were necessary and reasonable,
- require task sponsors to document direction given to the Applied Physics Lab,
- make clear who was responsible for monitoring cost incurred by the Applied Physics Lab, or
- make clear the contract administration functions required of the task sponsors.

Additionally, the NAVTECHREP office was unable to effectively administer the contract because the SPAWAR contracting officer assigned certain administrative functions to the task sponsors and because of staffing reductions at the NAVTECHREP office. As a result, the Government had no assurance that the Applied Physics Lab was the best qualified or the only qualified contractor to perform the task orders, that the costs that the Applied Physics Lab proposed and incurred were necessary and reasonable, and that all of the work ordered was within the scope of the contract.

Revised

Recommendation 1.

Issue guidance that requires task sponsors to determine whether the research and development work being considered for placement on contract N00039-95-C-0002 should be competed. The task sponsors should forward to the Space and Naval Warfare Systems Command for non-competitive award to the Applied Physics Laboratory only those task orders that the task sponsors determine should not be competitively awarded. Task sponsors should select for non-competitive award only the task orders for work that is within the essential capabilities established in the contract and for work for which a strategic relationship exists between the Navy and the Applied Physics Lab.

DON Position:

Concur. Individual task sponsors should make an affirmative determination/certification as to the applicability of 10 U.S.C. 2304(c)(3)(B) regarding tasks, prior to forwarding tasks to SPAWAR. 10 U.S.C. 2304(c)(3)(B) authorizes the use of other than competitive procedures to establish or maintain essential engineering, research, or developmental capability provided by an educational institution. Additionally, a final draft Management Plan for University Affiliated Research Centers has been prepared for approval by the Director of Defense Research and Engineering (DDR&E). SPAWAR will issue guidance to all task sponsors consistent with the approved management plan. Estimated completion date is 29 February 1996.

Recommendation 2.

Issue guidance that reemphasizes that task sponsors are required to determine whether the resources and associated costs proposed by the Applied Physics Lab for task orders are necessary and reasonable before signing the form letter that forwards the task order to the contracting officer for placement on the contract.

DON Position:

Concur. The current SPAWAR guidance document which includes this requirement for task sponsor review and certification is being updated and will be reissued to all task sponsors. Sponsor task certifications are being revised to require a determination that costs are fair and reasonable. This determination is subject to review by SPAWAR in accordance with the provisions of the sponsor task certification. Estimated completion date is 29 February 1996.

Recommendation 3.

Modify contract N00039-95-C-0002 to require that the Applied Physics Lab submit to task sponsors monthly or quarterly financial reports, as deliverables under the contract. The financial

reports should show total funds authorized, total level of effort authorized, funds and level of effort expended for the month or quarter and year-to-date, subcontractor amounts, balance of funds and level of effort remaining, and a brief summary of the work that the Applied Physics Lab accomplished during the reporting period. The Applied Physics Laboratory should submit the financial report no less than quarterly.

DON Position:

Concur. SPAWAR is working on establishing uniform financial reports for submission to task sponsors. SPAWAR will continue discussions with major task sponsors to develop a reporting format/requirement which best meets their joint needs, while avoiding redundant reports where sponsors are already getting adequate information. A uniform cost reporting requirement will be negotiated with JHU/APL and incorporated into contract N00039-95-C-0002. Estimated completion date is 28 June 1996.

Recommendation 4.

Transfer responsibility for contract administration from the Naval Technical Representative office to the Defense Contract Management Command.

DON Position:

Partially concur. There may be functions being performed by the Technical Representative's office that can be transferred to the Defense Contract Management Command (DCMC). SPAWAR will conduct a regular Command Inspection of the Naval Technical Representative (NTR) office in November 1995, including a review of staffing and functions performed. A final decision on transferring contract administration is subject to the results of the DCMC discussions and the planned inspection. The decision may also be affected by current planning for relocation of SPAWAR Headquarters to San Diego, as required by the Base Closure and Realignment Commission. The effect of this relocation on the SPAWAR university laboratory contract management function is currently under review. Estimated completion date for the above actions is 28 June 1996.

Additional comments:

1. Under "Monitoring Costs Incurred" on page 10 of the report it states that sponsors for only two of 36 task orders reviewed obtained cost information from the Applied Physics Laboratory to determine whether the Government received value for the cost incurred by the Applied Physics Laboratory. Sponsors for the other 33 task orders (one task order was not funded) stated that monitoring costs incurred by the Applied Physics Laboratory was the responsibility of SPAWAR. The Space and Naval Warfare

Final Report Reference

Systems Command (SPAWAR) contracting officer and the Director of the SPAWAR University Laboratory Management Office stated that they expected the task sponsors to monitor costs incurred by the Applied Physics Laboratory on their task orders.

Department of the Navy Response:

The Department of the Navy concurs that procedures for task sponsor costs monitoring should be reinforced, but disagrees with the finding that only two of 36 task sponsors obtained cost information to determine whether the Government received value for the cost incurred. SPAWAR queried a limited number of Navy sponsors whose tasks were reviewed by the DODIG (there wasn't sufficient time for extensive review and discussion with task sponsors), and found that the extent of sponsor monitoring of costs and performance by the Johns Hopkins University Applied Physics Laboratory (JHU/APL) is significantly greater than indicated in the DODIG draft report. For example:

(a) Task Order 13500-20. The financial officer for the program sponsor conducts monthly reviews of incurred costs for personnel, material and subcontracts, in addition to regularly scheduled technical reviews.

(b) Task Order 13500-28. The program sponsor conducts formal reviews quarterly, with fiscal status, expenditure rates, fund balances and critical management issues discussed in detail.

(c) Task Order 13500-14. Technical and cost reviews are held by the program sponsor at four month intervals. In addition, expenditure reports are periodically provided by JHU/APL to the task sponsor.

The above reports plus other technical reviews form the basis for individual sponsor cost/performance value judgments.

As indicated in our response to the recommendations, SPAWAR will take action to improve cost and performance reporting by JHU/APL to task sponsors, and will clarify task sponsor review responsibilities. SPAWAR will continue discussions with task sponsors to establish uniform cost reporting requirements and incorporate them as deliverables in the contract with JHU/APL.

Revised Pages 4, 6, and 14

2. On pages 4, 6 and 15 of the report it states that task sponsors must determine that the Applied Physics Laboratory is "the best qualified or the only qualified contractor that could perform the task orders..."(p.4) before forwarding the task to SPAWAR for inclusion in the contract.

Department of the Navy Response:

The Department of the Navy agrees that task sponsors should make a determination that tasks proposed for JHU/APL should be

placed non-competitively, based on the need for a strategic relationship for work within the Laboratory's approved core capabilities. However, the Navy disagrees with the use of the term "best qualified or the only qualified contractor", as not consistent with the DOD University Affiliated Research Centers (UARC) Management Plan. As stated in the UARC Management Plan, "...Within the core capabilities, the UARCs are the source of choice considering all relevant factors including the need for a strategic relationship."

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